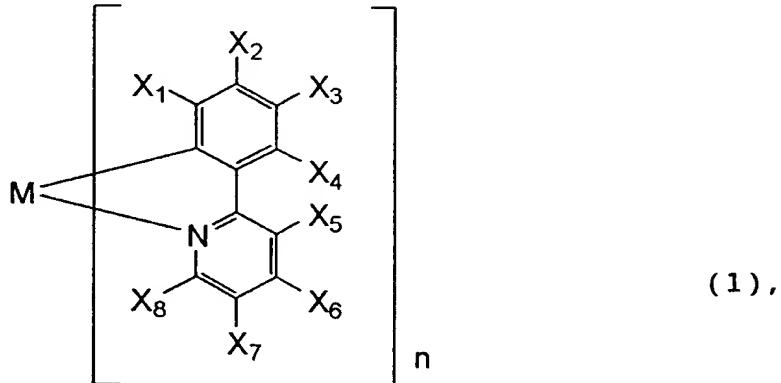


WHAT IS CLAIMED IS:

1. A luminescence device, comprising: an organic compound layer comprising a metal coordination compound represented by the following formula (1):

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(1),

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wherein M denotes Ir, Rh or Pd; n is 2 or 3; and X1 to X8 independently denote hydrogen atom or a substituent selected from the group consisting of halogen atom; nitro group; trifluoromethyl group trialkylsilyl group having three linear or branched alkyl groups each independently having 1 - 8 carbon atoms; and a linear or branched alkyl group having 2 - 20 carbon atoms capable of including one or at least two non-neighboring methylene groups which can be replaced with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C- and capable of including hydrogen atom which can be replaced with fluorine atom; with the proviso that at least one of X1 to X8 is a substituent other than hydrogen atom, and X2 and X3 cannot be fluorine atom at the same time.

2. A device according to Claim 1, wherein at least two of X1 to X8 are substituents other than hydrogen atom.

5 3. A device according to Claim 1, wherein at least one of X5 to X8 is a substituent other than hydrogen atom.

10 4. A device according to Claim 1, wherein at least two of X1 to X4 are substituents other than hydrogen atom.

15 5. A device according to Claim 1, wherein at least one of X2, X3 and X4 has a Hammett's substituent constant of at least 0.2 with respect to the carbon atom connected to M, and the metal coordination compound exhibits a peak emission wavelength in toluene at 25 °C of at most 490 nm.

20 6. A device according to Claim 1, wherein X2, X3 and X4 provides a sum of Hammett's substituent constant of at least 0.41 with respect to the carbon atom connected to M, and the metal coordination compound exhibits a peak emission wavelength in toluene at 25 °C of at most 490 nm.

25 7. A device according to Claim 6, wherein the

sum of Hammett's substituent constant is at least 0.50.

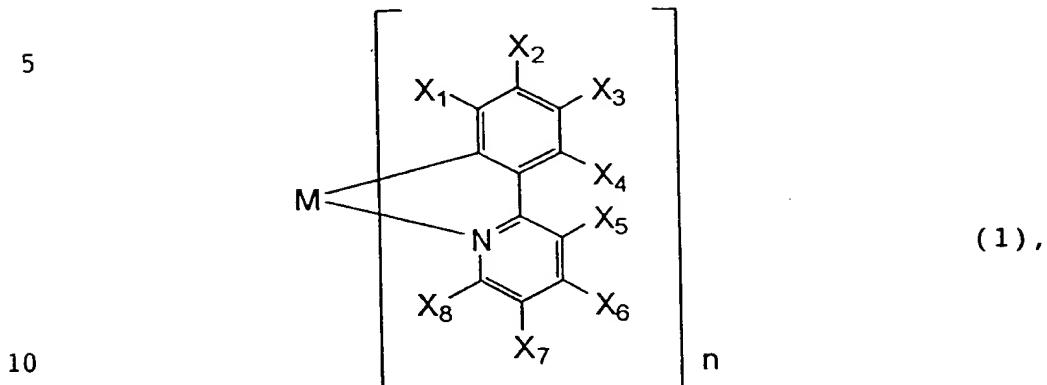
8. A luminescence device, comprising: an organic compound layer comprising a metal coordination compound having at least one substituent, wherein said at least one substituent includes a substituent having a Hammett's substituent constant of at least 0.2, and the metal coordination compound exhibits a peak emission wavelength in toluene at 25 °C of at most 490 nm.

9. A device according to Claim 8, wherein said at least one substituent includes two or more substituents each having a Hammett's substituent constant of at least 0.2.

10. A device according to Claim 1, further comprising a pair of electrodes oppositely disposed to sandwich the organic compound layer, wherein a voltage is applied between the pair of electrodes to cause luminescence.

11. A display apparatus, comprising: a luminescence device according to Claim 1 and drive means for driving the luminescence device.

12. A metal coordination compound, adapted for  
use in a luminescence device, represented by the  
following formula (1):



wherein M denotes Ir, Rh or Pd; n is 2 or 3; and X1 to  
X8 independently denote hydrogen atom or a substituent  
selected from the group consisting of halogen atom;  
15 nitro group; trifluoromethyl group trialkylsilyl group  
having three linear or branched alkyl groups each  
independently having 1 - 8 carbon atoms; and a linear  
or branched alkyl group having 2 - 20 carbon atoms  
capable of including one or at least two non-  
20 neighboring methylene groups which can be replaced  
with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C-  
and capable of including hydrogen atom which can be  
replaced with fluorine atom; with the proviso that at  
least one of X1 to X8 is a substituent other than  
25 hydrogen atom, and X2 and X3 cannot be fluorine atom  
at the same time.

13. A compound according to Claim 12, wherein at least two of X<sub>1</sub> to X<sub>8</sub> are substituents other than hydrogen atom.

5       14. A compound according to Claim 12, wherein at least one of X<sub>5</sub> to X<sub>8</sub> is a substituent other than hydrogen atom.

10      15. A compound according to Claim 12, wherein at least two of X<sub>1</sub> to X<sub>4</sub> are substituents other than hydrogen atom.

15      16. A compound according to Claim 12, wherein at least one of X<sub>2</sub>, X<sub>3</sub> and X<sub>4</sub> has a Hammett's substituent constant of at least 0.2 with respect to the carbon atom connected to M, and the metal coordination compound exhibits a peak emission wavelength in toluene at 25 °C of at most 490 nm.

20      17. A compound according to Claim 12, wherein X<sub>2</sub>, X<sub>3</sub> and X<sub>4</sub> provides a sum of Hammett's substituent constant of at least 0.41 with respect to the carbon atom connected to M, and the metal coordination compound exhibits a peak emission wavelength in toluene at 25 °C of at most 490 nm.

25      18. A compound according to Claim 17, wherein the

sum of Hammett's substituent constant is at least 0.50.

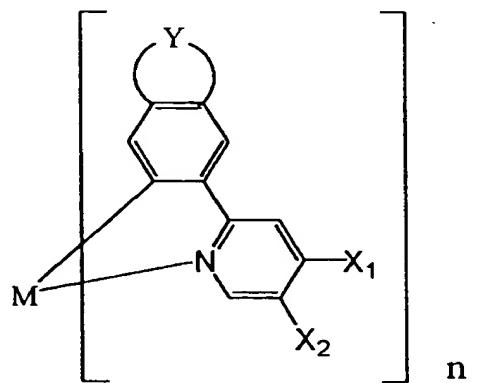
19. A metal coordination compound having at least 5 one substituent adapted for use in a luminescence device, wherein

said at least one substituent includes a substituent having a Hammett's substituent constant of at least 0.2, and the metal coordination compound 10 exhibits a peak emission wavelength in toluene at 25 25 °C of at most 490 nm.

20. A compound according to Claim 19, wherein 15 said at least one substituent includes two or more substituents each having a Hammett's substituent constant of at least 0.2.

21. A luminescence device, comprising: an organic compound layer comprising a metal coordination 20 compound represented by the following formula (2):

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(2),

wherein M denotes Ir, Rh or Pd; n is 2 or 3; Y denotes an alkylene group having 2 - 4 carbon atoms capable of including one or at least two non-neighboring methylene groups which can be replaced with -O-, -S- or -CO- and capable of including hydrogen atom which can be replaced with a linear or branched alkyl group having 1 - 10 carbon atoms; and X1 and X2 independently denote hydrogen atom; halogen atom; nitro group; trialkylsilyl group having 1 - 8 carbon atoms; or a linear or branched alkyl group having 1 - 20 carbon atoms capable of including one or at least two non-neighboring methylene groups which can be replaced with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH- or -C≡C- and capable of including hydrogen atom which can be replaced with fluorine atom.

22. A device according to Claim 21, wherein at least one of X1 to X2 is hydrogen atom.

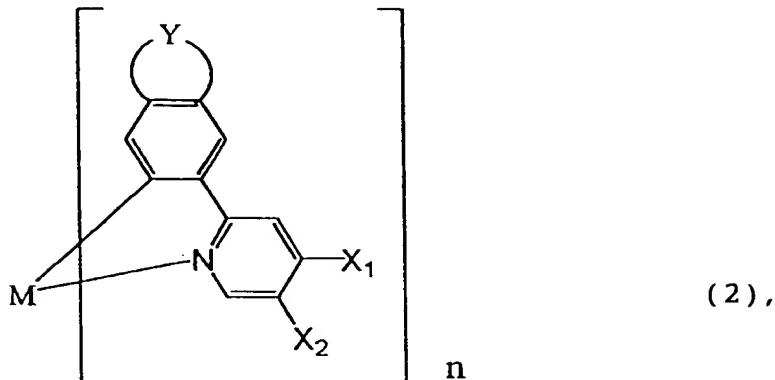
20        23. A device according to Claim 21, further comprising a pair of electrodes oppositely disposed to sandwich the organic compound layer, wherein a voltage is applied between the pair of electrodes to cause luminescence.

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24. A metal coordination compound, adapted for use in a luminescence device, represented by the

following formula (2):

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10 wherein M denotes Ir, Rh or Pd; n is 2 or 3; Y denotes  
an alkylene group having 2 - 4 carbon atoms capable of  
including one or at least two non-neighboring  
methylene groups which can be replaced with -O-, -S-  
or -CO- and capable of including hydrogen atom which  
can be replaced with a linear or branched alkyl group  
having 1 - 10 carbon atoms; and X1 and X2  
15 independently denote hydrogen atom; halogen atom;  
nitro group; trialkylsilyl group having 1 - 8 carbon  
atoms; or a linear or branched alkyl group having 1 -  
20 carbon atoms capable of including one or at least  
two non-neighboring methylene groups which can be  
replaced with -O-, -S-, -CO-, -CO-O-, -O-CO-, -CH=CH-  
or -C≡C- and capable of including hydrogen atom which  
can be replaced with fluorine atom.

25

25. A compound according to Claim 24, wherein at  
least one of X1 to X2 is hydrogen atom.